

ПРОБЛЕМЫ ФОРМИРОВАНИЯ КОМФОРТНОЙ АРХИТЕКТУРНО-ГРАДОСТРОИТЕЛЬНОЙ СРЕДЫ, ЭКОЛОГИЧЕСКОГО СТРОИТЕЛЬСТВА И РАЗВИТИЯ ЖИЛИЩНО-КОММУНАЛЬНОГО КОМПЛЕКСА

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EVALUATION OF CHALLENGES FACED BY URBAN PLANNERS. A STUDY OF ECOLOGICAL CONSTRUCTION AND SUSTAINABILITY IN BUILT ENVIRONMENT

Abstract:

Urban planning has become increasingly consistent in leading cities toward an uncertain and chaotic future. Urban Planner needs to provide the basic needs for the growing population yet they face major challenges. Conventional Construction has compromised the green environment. Ecological Construction is being practiced to reduce the industry's impact on the environment by utilizing sustainable development practices. Sustainable built environment is relatively important to urban growth management that deals with environmental problems, housing issues, and community well-being. In modern world all countries are trying to attain Sustainable Development. This paper is a little contribution in efforts of attaining green environment. This paper will discuss main issues of urban planning, importance of Ecological Construction and attaining sustainability in built environment.

Keywords:

Urban planning, ecological construction, sustainability, built environment.

Introduction

Urban planning typifies a dream that passes on the desires of both the public authority and individuals. The better adjusted the aggregate vision from both the public authority and individuals, the more sensible and implementable are the plans. It doesn't need to paint a grandiose, out of reach objective yet it ought to be appealing and relevant utilizing the interesting resources and attributes of each spot, local area or city. Truth be told, the more practical the vision is, and the more individuals can identify with it, the better [1]. There are maybe two normal misguided judgments about urban

planning: (i) it is an exorbitant exercise that sets aside an extremely long effort to finish; and (ii) an arrangement is an unbending, unyielding administrative archive that doesn't react to on-the-ground needs and changes. Yes, while the typical developed country model of comprehensive urban planning may require high technology, high capacity analysis, extensive modeling and typically large amount of resources, that is not the only form of planning. Gathering a block of residents and agree that a road is needed at a certain alignment is planning; the roads agency meeting the drainage agency to coordinate construction schedule for a road is planning; the community leader discussing with the residents on the vision of the community is planning. We must recognize the intrinsic values of planning and then determine the corresponding resources to commit to it.

Around half of all non-renewable resources humanity devours are utilized in development, making it one of the most un-reasonable ventures in the world. Nonetheless, humankind has spent most of its reality attempting to control the indigenous habitat to more readily suit its necessities so today our day by day lives are done in and on developments of some sort: we live in houses, we travel on roads, we work and associate in structures, everything being equal. Contemporary human progress relies upon structures and what they contain for its proceeded with presence, but world can't uphold the current degree of asset utilization related with them [2].

This article identifies important factors and presents a decision framework that incorporates the economic, business, environmental and social aspects within a built environment context while building some initial concepts of sustainability modernization theory. The decision model sets the stage whose overall objective is to aid a decision maker in selecting the sub-contractors that can most sustainably contribute to a construction project.

Research Questions

1. What Challenges Urban Planners are facing?
2. How Ecological Construction play role in Environment Quality?
3. How to bring Sustainability in The Built Environment?

Literature Review. History of Urban Planning

Every city in this world is being planned whether they realize it or not. Without legitimate planning, any city will fall flat. As known by many, planning is about the craftsmanship and study of requesting the land uses and sitting the structures to get the greatest degree of economy, accommodation and magnificence [3]. The idea of urban planning has changed throughout the time. Since 1960s response towards actual planning has made new awareness. Actual climate would give networks all they expected to live prosperous and satisfying lives without looking complex social and cultural networks in the community the old customary planning has been supplanted with "postmodernism" planning which focuses more on appreciating the cultural differences in a responsive, flexible and democratic style. At the end of the day, this strategy for planning is more granular perspective whereby the planner is making decision based on demand, desire and value of the community. Nonetheless, the modern entrepreneurs see this methodology in various worth and they think it's anything but an insightful worldwide economic development. Subsequently, the past idea of so called welfare state has been destabilized and replaced with new one which focuses more on privatization and entrepreneurialism. After some time, the economic experiences fluctuation. Consequently, it requires this strategy to be reanalyzed and planning should be an interceding power among social and economic. For example, in 2005, the New South Wales of Australian Government made an arrangement with privately owned business to subsidize and underground road tunnel project [4]. In a present day, planning is viewed as more political and enterprising and advancing like in developing countries. Urban planning is a main job to make winning alliance between stakeholders. Planning is political as it involves community emotion, the planning decisions are visible, planning is close at hand of society, citizens know about planning, planning decisions involve financial consequences of citizens and planning has a link with taxes. In the layout plan, it might include land use, transportation, utilities and infrastructures, parks and recreation, demographics, economic systems, & summary of policies. The other concept is Blueprint Planning which involves comprehensive approach.

The other idea is Blueprint Planning [3] which includes thorough methodology. Has been utilized since 1947 in UK planning requires interest from specialized callings like professions such as architecture, surveying and engineering and predominantly physical in character; land-use map, zoning, density controls, building regulations and standards. Objectives and goals of the end-all strategy or diagram are chosen by political representatives. The other ordinary idea of urban planning is Process Planning which regards planning as a continuous process and it is not static. It additionally fuses social and economic planning with steady survey of execution and change. By and large, it has tendency to be ad hoc in nature with flexible relationship towards a market economy or fluctuating public interest. Then, the other idea is Islamic Planning. The idea of Khaliah, vicegerent, and custodianship was presented and polished. In this idea, planning is disturbing about ensuring the common habitat simultaneously underscoring on the advancement of human-prosperity and economic development. Any planning should look on the parts of wellbeing, property, religion, and family. What's more, urban planning these days' worries about moral, good and evolving values. Urban planning isn't without value on the grounds that the residents of any city have diverse interest and want contingent upon what their identity is and their admittance to power, information and resources.

The urban planner can't just arrange and carries out it as we need to get the endorsement from general society. As such, a democratic action and involves power and intervention. As the extent of planning become more extensive, the targets likewise get more muddled. Hypothesis and practice of urban planning rise up out of multi-disciplinary zones and has developed from various economic, political, and historical context. The planner must arbitrate power between people and the world. There are four qualities of fruitful urban planning which are: the promotion of accessibility, the employment of resources, the separation of incompatible land uses and the carrying out of all development in as visually pleasant manner and practical. Firstly, planning should secure the environment. Along these lines, whatever arrangement being carried out, there should be strategy and requirement with the goal that any economic activity and improvement would not damage the environment. Urban planner endeavors to deal with the effects of progress on our urban areas, our surroundings, our work, our transport needs and our lives. They should consider environmental impressions, and consciousness of the current age. Furthermore, another significant component in great urban planning characters ought to consider tasteful worth and character of character of "home" and "sense of place", local identity, respect for natural, artistic and historic heritage, an understanding of the "urban grain" or "townscape". Then, the target of urban planning is to guarantee wellbeing and security from outrageous climate, flood, different crises and social wrongdoing. Likewise, urban planner should ensure their planning effective in aiding economic development. Thus, extensive attainability study should be directed. Urban planner should support feasible and bearable commercial activities to be occurred around there. Besides, to give the fundamental necessities to the developing populace is additionally urban planner's duty. Any city should have satisfactory admittance to foundations like clean water, electricity and communication [5].

Challenges Planners Face

This part will examine about the challenges face by urban planners. Arranging firmly related and reacts to natural and social issues. As populace develops, urban sprawl has possibly destructive impacts of encompassing farmlands or lacking area [2]. Any issues happened in the city will alluded to planner since they are the one who approve the development. For example, the traffic congestion and quick flood in Kuala Lumpur which public regularly blame the urban planner in view of awful planning. Besides, planning is identified with government's and public's discernment. Planner becomes mediating power between people and government. Planning is additionally interceded by government who they have their own desire in building up the city. Usually urban planners don't have any choice however to follow the government's instructions and execute the instructions. Some of the time, if the planning is the awful, the resident will see it as planner's bad planning. Simultaneously, planners need to satisfy the interest of the local area and frequently bring about clashing result. To satisfy the social demands, they need more public participation. Be that as it may, at times the public are not taking part in the urban planning [6, 7].

For example, in the planning of local plan, the public contribution is mandatory to forestall and limit clashing interest of land use drafting. Nonetheless, the issues just show up after the endorsement of the arrangement in light of the fact that the general population is not participating [8]. Thirdly, planner needs to satisfy the economic desire, simultaneously protecting the regular habitat and creature natural surroundings. Thus, the planning should be able to create sustainable development. A good example of planning is Petaling Jaya City Hall which succeeds in achieving excellent economic growth with sustainable and livable community. Also, other challenge faced by the urban planner is to plan greater and ceaseless developing populace. Urban planning for dynamic population is complex, and accurate projections for the future are required thus, the planners need to design more deliberate and forward-glancing procedures to provide housing, transportation, land, job and others. Advanced planning information systems, for example, 3D planning programs are significant demonstrating instruments which can produce projections. For example, in a metropolitan city like Kuala Lumpur, the growing public populace and outsiders had caused difficulties for planners. The land value gets higher, land is more difficult to find, work is more difficult to find, and living expense is higher. Moreover, development of populace will mess social up and wrongdoing to be increment [9].

Thus, the planners need to configuration house planning in a manner that can help in forestalling wrongdoing. The criminal which becomes responsibility to the city would cause destabilization and breakdown of the city. At that point, planner needs to rethink the foundation planning to tackle the developing populace. For example, Selangor at present encountering water supply issue and influencing enormous territory. People are griping and accusing the government and the planner. A similar issue goes to electrical foundation, economic crisis in current time and tight funds are challenges faced by planner. Implying that, planner needs to achieve more with less financial plans given. Additionally, the basic capacity of preparation is to advance acceptable personal satisfaction which is wellbeing, security and government assistance [1]. Fundamentally, in the age of austerity, planners will have to make sharp and accurate appraisals of the long-term value of their work finally, environmental change is another challenge faced by urban planner [2]. Normal temperature will increment about 5C. This Earth-wide temperature boost influences the earth in two ways, which are ascend in ocean level and prompting natural disaster. Thus, city needs to adjust to this situation and improve defenses against disaster. More or less, arranging is a multidisciplinary task and continually changing and requires reformist change now and again. As the time moving, the idea, scope, definition, challenges likewise evolving. Numerous elements ought to be viewed as when arranging such local area, climate, transportation, housing, environment, economic, political and others. Albeit the mission is something similar; which is to advance better personal satisfaction, anyway the procedure and execution of various urban communities are fluctuate. Thus, planners should design cautiously in a decent way, morals and standard [7, 9].

Ecological Construction

The construction industry is one of the mainstays of the domestic economy for most countries. The construction environment carries social responsibility as to create wellbeing structures and designs that give negligible effect on the environment and gives infrastructure support, to different areas. In any case, because of inefficient management rehearses, the construction environment has prompted unnecessary expenses, time waste, increase errors and misunderstanding [10]. Malaysia started to build up the construction industry since freedom where it has a vital impact in the economy as a significant marker and determinants of domestic performance comprehensive the interaction of industrialization, social foundation and reproduction.

Modern houses can be developed from a wide variety of secondary materials, including reused wood, straw, plastics, steel trailers and different metal items. Customary auxiliary structure materials incorporate reused wood, doors and frames from different houses or materials staying from other structure projects. By over and again utilizing these materials in new construction, the construction organization and the proprietor of the new house new house keep reducing landfill waste and wipe out the need to buy new construction materials [11]. Another technique for utilizing reused materials is to change them over to new features. Such features incorporate cupboards, doors, partitions, floors,

and other construction materials. The reused items themselves may contain 30–100 % of recyclable materials. Remarkable construction materials incorporate steel trailers, straw bales and other large objects. The world practice incorporates situations when private houses were constructed utilizing the old body parts of vehicles and decommissioned airplanes.

Under the direction of the idea of ecological city, the construction of an ecological city in different nations has gained quick headway and accomplished rich outcomes [10, 12]. The "Shadow Plan" of Adelaide, Australia portrays the ecological city construction and improvement plan in detail from 1836 to 2136 through six plans. The dissemination of the six plans addresses the stage objective of the city's ecological city construction and advances the solid construction measures. Cleveland, United States, has clear agenda of an ecological city, which incorporates a scope of explicit objectives and rules, for example, air quality, environmental change, energy, green structures, green space, infrastructure, government administration, neighborhood networks, public wellbeing, smart development, provincial point of view, transportation alternatives, water quality, and waterfront construction. The objective of the undertaking is to construct a green city along the Great Lakes. From the start of preparation, Chiba New City in Japan has taken the foundation of an ecological city as its primary objective. The principle of its planning highly respected the original natural landforms and lakes, rivers, and mountain forests, which are carefully planned in urban areas. With the corresponding landscape design, closely combined with a number of public exchange activities and facilities, a dozens of landscapes with different sizes and characteristics and uniform distribution in urban open parks were formed. The "Ecological City 1997–1999" in Copenhagen, Denmark is a thorough venture with rich content. This project attempts to establish a model project in urban areas with clear objectives that include the development of implementation methods and environmental objectives. The content of the task spins around accomplishing its objective. Erlangen, Germany strengthens landscape planning and environmental planning in urban planning; attaches importance to the protection of ecological areas, like forest and valleys; and makes more green spaces and green corridors all through the city dependent on the possibility of sustainable development. This task embraces incorporated transportation strategy and saves resources and energy, among others. Curitiba, Brazil has gotten a model a model for sustainable urban planning through the public transit-oriented urban development planning, social welfare projects and ecological training for resident.

Ecological modernization is continuously transforming into the overwhelming discuss ecological organization in the world. There are various varieties of ecological modernization, yet at the root they share the conviction that but ecological degradation emerged hence the modernization cycle; it is an outcome of a 'fundamental model lack of progression' instead of a basic imperfection of business visionary strategies for creation and use. Common debasement can be overpowered by subbing nonsensical advances for sustainable ones, growing reusing and restricting waste, and through a reducing in material and energy inputs. In this sense, characteristic change can be made to be monetarily appealing and financial improvement can get decoupled from natural corruption [13].

Sustainability and Built environment

The built environment incorporates all structures and living spaces that are made, or altered, by people. Notwithstanding the structures and spaces themselves, it additionally incorporates the infrastructural components like waste management, transportation and utility transmission systems set up to serve this structure space. While assessing the built environment, it is essential to take a wide view joining more extensive partners and networks, past prompt investors or building users [14]. The intergenerational part of sustainability is significantly more relevant in the built environment since the constructions are normally affecting the necessities and requirements of people in the future. Sustainable construction is an arising field of science that targets fusing the overall feasible improvement ideas of sustainable development in conventional construction. The triple-bottom line factors related with the decisions made in the plan and development of buildings and outside living spaces should likewise be adjusted. As well as adjusting these regularly clashing objectives locally [15], the choices made about the built environment should likewise consider how decisions made about building materials and systems can have environmental and social impacts on broader regional and global dimensions. For instance, entire supply chain for construction ought to be assessed - from

the determination of sustainable material, for example, bamboo wood to discovering contractor and subcontractor sources with corporate socially responsible practices.

To have the option to assess the sustainability measurements of the built environment, it is beneficial to comprehend the life cycle processes for industrial and commercial buildings and the actors who assume a part inside these processes. The process can be very complex with various sub processes that may have shifting degrees of significance relying upon the qualities of the built environment project. For commercial property the process may go from assessment of property choices to inhabitation and the board of these properties during the use stages to end-of-life [16].

Ecological modernization theory (EMT) is a theory for environmental innovation that has been offered as a potential answer for the contention among industrial and commercial developments and environmental protection. EMT is especially valuable to contemplate issues on environmental protection identifying with vital role of governments and rebuilding of production by manufacturers. Applications and advancement of the theory have been mostly kept to the part of governments regarding guidelines and strategies planned and carried out for environmental protection [13, 17]. The possibility of ecological modernization is to ease environmental issues by making resources less inefficient and in this manner more sustainable, while holding the essential arrangement of industrialist creation and utilization. The way to deal with environmental protection can be seen by business ventures not as a issue, however more as an opportunity. EMT recommends that manufacturers can conquer the extensive obstructions to development which keep them from moving out of hand advances to think about clean technologies, from supplementing technological change with hierarchical change and from investigating the vital just as the operational chances for development. Ecological modernization is concerned with a continual process of institutional, large scale (government, country) and miniature (organization)- level, to build the environmental effectiveness of an economy.

At an organizational (micro) level of examination, EMT is inseparable from key environmental management in individual organizations EMT builds up the perspectives researchers who rethink environmental issues as failures or efficiency misfortune. EMT stresses true requirement for corporate management to perceive ecological issues as a method for upgrading intensity. EMT puts substantial accentuation upon technological advancement; the creation development dissemination of new, cleaner innovations and technologies. There are quick and long haul goals of EMT. The previous incorporates waste reduction and elimination, resource recovery and reuse, and dematerialization. Long haul targets identify with resources preservation and clean creation. Despite the fact that the built environment as once in a while been incorporated into the talk on EMT [13, 15], late endeavors have been made by developed countries, for example, the Netherlands to start including this industry. Technological and process up gradation that can have generous environmental and economic advantages can go from new energy technologies, for example, waste heating from nearby manufacturing facilities in eco-industrial parks to effective development of new waste water and miniature recycling system that can be carried out by plumbers. Various models exist for EMT in the built environment; effective instantiation and execution requires huge project worker and sub-project worker support [13, 16].

Research Methodology

Data used in this paper is taken from secondary sources. It is collected from many sources such as, articles, reports, journals, websites etc.

Results

The idea of urban planning has changed throughout the time. In past idea was that actual environment would provide communities with all they needed to live in happy and fulfilling lives without looking at the complex social and cultural networks in the community. However as of late significant idea is to protect the environment. Planner becomes mediating power among people and government. Often Planners are bound to follow government rules. If the plan is not good, the citizen will perceive it as planner's mistake. Simultaneously, planners need more public cooperation. Yet, at times the citizens are not participating in the planning process. Planner needs to satisfy the economical aspirations, at the same time preserving the natural environment and animal habitat. So, the plan must

be able to create sustainable development. Some cities in the world succeed in achieving excellent economic growth with sustainable and livable community. Some major issues like Expansion of population, water supply problem, electrical infrastructure and tight finances are challenges faced by planner. Planning is a multidisciplinary task and continually changing and requires reformist change every now and then. As the time moving, the idea, scope, definition, challenges additionally evolving. Numerous variables ought to be viewed as when planning such local area, environment, transportation, housing, environment, economics, political and others. Although the mission is the same; which is to advance better quality of life, anyway the methodology and execution of various urban areas are fluctuating. In this way, planners should design cautiously in a decent way, morals and standard.

The construction industry is one of the mainstays of the domestic economy for most countries. All developed countries have plan for eco-friendly construction for a scope of explicit objectives, for example, air quality, green buildings, public wellbeing and smart development. All modern buildings are being built from reused materials. Aftereffect of Ecological Modernization is environmental degradation which is because of structural design faults. These flaws can be corrected by replacing unsustainable technologies with sustainable technologies.

Built environment incorporates all buildings and living spaces that are made, or changed; by individuals it likewise incorporates the infrastructural components like waste management, transportation and utility transmission systems. Economical construction is an arising field of science that targets the general sustainable development concepts into conventional construction practices

To assess the sustainability measurements of the built environment, it is beneficial to comprehend the cycle process for industrial and commercial buildings and the actors who play a part inside these cycles. For commercial property the interaction may go from assessment of property choices to occupancy and management of these properties during the utilization stages to end-of-life.

Ecological modernization theory (EMT) is a theory for environmental innovation that has been offered as a potential solution to the conflict between industrial and commercial development and environmental protection. EMT underlines the requirement for corporate management to perceive ecological issues as methods for improving competitiveness. There are prompt and long haul objectives of EMT. Long haul destinations identify with resources preservation and clean creation. Innovative and process up gradation that can have significant environmental and economic advantages can go from new energy technologies, for example, waste heating from nearby manufacturing facilities in eco-industrial parks to effective development of new waste water and micro-recycling systems.

Conclusion

In past years need was simply to live a cheerful and social life. But over the years' human understood the significance of protecting the environment. In recent years' planners have become more attentive towards green environment and global warming. Yet at the same time there are enormous challenges in front of planners which we have observed in this study. There should be a system in all countries in which contribution of public should be mandatory in urban planning. For sake of wellbeing of public and environment, government should introduce such policies in which urban planners should have competent authority to perform their work without intervention of government. There should be special conflict management courses for urban planners, so that they can tackle the confliction between public and government and be able to provide better solutions. Government should play role in increasing budget for ecological development so that Planners should follow modern architectural design ideas and technologies to avoid errors in designs.

As per study, ecological construction is need of all countries these days to keep up environment quality. All developed countries have plans and agenda of ecological construction and they are promoting green building concepts. Developed countries should finance and educate developing and under developed countries to opt green building concepts and ecological construction for purpose of protecting the environment.

There are various approaches to accomplish sustainability in built environment. For example, sustainable waste management, sustainable transportation and sustainable practices. In Industrial and

commercial sectors ecological modernization theory should to be applied to get more environmental and economic benefits with modern technologies.

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